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C-52-5-5-2300W

May 16, 1995

Project Number 1679

Mr. Paul Kulpa  
Rhode Island Department of Environmental Management  
Division of Site Remediation  
291 Promenade Street  
Providence, Rhode Island 02908

Reference: CLEAN Contract No. N62472-90-D-1298, Contract Task Order 172

Subject: Revisions to HNUS Melville North Landfill RI/FS Work Plan in Response to RIDEM's Comments

Dear Mr. Kulpa:

On behalf of Northern Division, NAVFACENGCOM, enclosed please find six (6) copies of the revised text, figures, and tables of the above mentioned work plan, made in response to the above referenced RIDEM comment letter dated February 26, 1995, and the April 7, 1995, conference call between RIDEM, Navy, and HNUS. Also enclosed is a narrative which details the specific responses to the RIDEM comments in order to facilitate the review process. HNUS believed that the enclosed revisions to the work plan pages satisfy all RIDEM concerns and agreed upon requests. We request your prompt review and response to our revisions so that we may immediately begin the investigation/remediation process of this site.

If you have any questions regarding this matter, please contact Debbie Carlson, Northern Division Remedial Project Manager, at (610) 595-0567.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin J. Scully".

Kevin J. Scully, P.G.  
Project Manager

KJS/ib

Enclosures

- c: D. Carlson, Navy w/enc. (5)  
R. Gottlieb, RIDEM w/enc. (1)  
B. Wheeler, Navy-NETC w/enc. (6)  
A. Miniuks, EPA w/enc. (4)  
T. Prior, USFWS w/enc. (1)  
M. Turco, HNUS w/o enc.  
G. Bullard, HNUS w/o enc.  
File 1679-3.2 w/o enc./1679-2.1 w/enc. (1)

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**NAVY RESPONSE TO  
RIDEM COMMENTS ON THE  
PHASE II RI/FS WORK PLAN (DRAFT)  
MELVILLE NORTH LANDFILL  
PORTSMOUTH, RHODE ISLAND**

**1. General Comment**

The Waste Pits (fenced in area in the northern portion of the site) identified in the Initial Assessment Study and the Confirmation Study were not investigated during Phase I activities carried out at the site. The Phase II Sampling Plan has also failed to address this area. This area must be investigated during Phase II activities. This investigation will at a minimum include surface and subsurface soil samples, waste pit samples and monitoring wells.

*These issues were not addressed in the Draft Phase II Work Plan, however, the Navy has indicated that subsurface soil or waste samples will be taken from these areas.*

**Response**

The Waste Pits referenced in the RIDEM comments have been determined to be part of Site 06 (STP Drying Beds) and as a formerly utilized defense site is now under the jurisdiction of the Army Corps of Engineers. These pits will therefore not be included in this investigation.

**2. General Comment**

The Work Plan should note that TPH analysis will be required for certain samples or sample locations. The decision to analyze for TPH will be based upon field observations and historic information. Based upon the latter criteria the Division anticipates that TPH analysis will be conducted on soil and groundwater samples in the vicinity of the past and planned removal actions. The Oil Pollution Control Regulations Sections 4(a), 12(a) and 12(c) are pertinent to the investigations carried out at the site. The Division recommends using EPA Method 418.1 for heavy or weathered oils.

**Response**

At the request of RIDEM, the Navy has directed HNUS to include the collection of TPH soil samples for analysis using EPA Method 418.1 (modified) during the test pit and soil boring program. The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-20A
- Page 4-20B
- Page 5-25Rev
- Page 5-28Rev
- Table 4-1, Revision 1
- Table 4-2, Revision 1
- Table 4-3, Revision 1

**3. Volume III, Page 2-2:  
Section 3.4, Paragraph 1**

"Activity on the site dates back to 1951, where lagoons and a structure which could be a building or tank are visible on the site. Areas of ponded water are visible at various locations throughout the site from 1951 until 1975. In an undated photo estimated to have been taken between 1970 and 1975, two obviously man-made impoundments are visible along the northern spur access road (see Figure 1-3)."

Please indicate the above mentioned features, as well as other pertinent features, (oily piles, tar deposits, fenced waste pits etc.) on the appropriate figure(s). In addition, if available the report should delineate the areas of the bay or wetlands which have been filled in.

*The requested figures were not provided in the draft submittal. The State is aware that the next submittal will include a figure with all of the requested information (1951 lagoons, 1971 man made impoundments, etc., the State has received a Fax figure showing the location of the 1951 lagoons?). Please be advised, the information provided in this figure may potentially affect the final location and approval of sampling points.*

**Response**

The workplan has been revised to show the locations of : the former mounds of saturated soil; the suspected waste lagoons; and the proposed soil removal areas ( S and N), as requested by RIDEM. The fenced waste pits have not been identified since they are not within the landfill site boundaries and are under the jurisdiction of the Army Corp Of Engineers. The locations of the mounds of saturated soil have been included on Figure 4-1 (Phase I Investigation Summary) only since they have not impacted site groundwater and have been completely removed (as indicated by confirmatory sampling). These former oily mounds are therefore no longer relevant to subsequent investigatory activities.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Figure 4-1, Revision 1
- Figure 4-2, Revision 1

**4. Volume III, Page 3-3:  
Section 3.5.2, Paragraphs 1 and 2  
(Section 4.2.6.2, Split Barrel Sampling Procedures)**

"Split spoon samples will be screened with an OVA and HNU immediately upon being opened."

In order to optimize sample selection for laboratory analysis the following procedures should be employed for all split spoon samples:

The samples chosen for analytical analysis should be based on field observations as well as headspace readings. Two samples should be collected for each split spoon and a headspace analysis run on one of the samples collected. The other sample should be held for possible

laboratory analysis. The Division is confident that the implementation of the above headspace procedure will not significantly increase project expense or cause any appreciable project delays.

*Per the Navy's request the following procedure should be employed during headspace analysis:*

*A representative aliquot of soil is placed in a jar, sealed and allowed to equilibrate for approximately five minutes. At the same time an initial, quick PID/FID reading is taken of the split spoon for health and safety reasons.*

*Should ambient temperature conditions warrant, this equilibration may have to take place in a heated vehicle, a water bath or any other appropriate location. The Navy may elect to shake the jar prior to collecting a headspace reading.*

*The headspace reading is collected by either puncturing the seal or removing the cover just enough to allow for the insertion of a probe.*

*In the event of insufficient recovery from a split spoon, the initial FID or PID reading of the split spoon maybe used in lieu of the headspace analysis.*

#### **Response**

As requested by RIDEM, a headspace monitoring procedure has been included in the work plan. All applicable portions of the above referenced headspace procedure provided by RIDEM have been included in the workplan. The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-4Rev
- Page 4-20A
- Page 4-20B

**5. Volume III, Page 34:  
Section 3.5.2, Paragraph 2  
(Section 4.2.6.2, Split Barrel Sampling Procedures)**

**"If signs of potential contamination (e.g., oil, stains, odors) are observed in a boring, a third sample will also be collected from the depth of greatest observed contamination (i.e., most oily, highest OVA/HNU readings)."**

The maximum number of samples to be collected will be determined by field observations. Therefore the above should be modified as follows: If signs of potential contamination (e.g., oil stains, odors) are observed in a boring, additional samples will be collected from the depth of observed contamination (i.e., oily deposits, high OVA/HNU readings).

*The Navy has indicated that the third sample will be collected based upon field observations. The Division is aware that field conditions may warrant the collection of additional samples. Therefore, field conditions will dictate the maximum number of samples.*

*The site is a landfill, which apparently received a final cover, (trash protruding through the soil was not wide spread at the site). In addition, low levels of contaminants were observed*

*in the majority of the samples collected in the 0-1 foot interval during the Phase I Investigation. Therefore, the Division recommends for the monitoring well and borings installed at the site that additional subsurface samples surface soil samples be collected in lieu of surface soil samples in the absence of obvious signs of contamination in the 0-1 foot interval. This would avoid the unnecessary analysis of uncontaminated cover material.*

#### **Response**

The workplan states that a minimum number of two soil samples will be selected from each of the soil borings with the provision of a third sample, to be collected if there are visible signs of soil contamination. Due to budgetary limitations, the Navy must establish an upper limit regarding the number of samples to be collected. Therefore, three samples per boring is the maximum number of samples that will be collected from any single boring. HNUS believes that, given the shallow depth of groundwater (10 feet or less) and thin overburden coverage (believed to be 20 feet or less) at the site, this sampling density is sufficient to provide the data required for supporting the site Feasibility Study.

The workplan has also been revised to state that field observations will be considered when choosing surface sampling points and that HNUS may, at it's discretion, forgo surface sample collection in lieu of additional subsurface sample collection.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-20Rev

**6. Volume III, Page 34:  
Section 3.5.2, Paragraph 2  
(Section 4.2.6.2, Split Barrel Sampling Procedures)**

"Only the surface interval (0 to 1 foot) sample will be collected for analysis at the three off-site well boring locations."

The report has failed to justify the above deviation from the soil boring sampling (i.e. sample limitation to the 0-1 foot interval). The off-site well borings are to address potential off-site contamination. Therefore, the criteria employed for the on-site borings should be used at off-site boring locations.

*The Navy has indicated that the next draft will stipulate that off-site subsurface background samples will be collected. This will satisfy the Division's requirements.*

#### **Response**

HNUS has modified the collection of soil samples from the planned upgradient wells to collect subsurface soil samples instead of surface soil samples. This will provide the background subsurface soil quality data requested by RIDEM.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 3-10Rev

- Page 4-20A

**7. Section 3.2.1, Data Gaps:  
Page 3-7 Paragraph 1.**

This section of the report addresses data gaps in the Phase I Investigation. The report should note that significant contamination was observed in the vicinity of boring B-12. The Division recommends investigation of this area with either a soil gas survey or test pits (the Division believes that test pits would provide more information).

**Response**

At the request of RIDEM, the Navy has directed HNUS to conduct test pitting at the site in lieu of a soil gas survey. The test pitting will occur in the vicinity of Boring B-12. The Test pit will be field screened (with a FID or PID) and logged. A maximum of two soil sampling locations will be chosen from the test pit based on field observations.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 3-8Rev
- Page 3-9Rev
- Page 3-10Rev
- Section 4.2.2
  - Page 4-3Rev
  - Page 4-4Rev
  - Page 4-5Rev
  - Page 4-6Rev
- Table 4-1, Revision 1
- Table 4-2, Revision 1
- Table 4-3, Revision 1
- Figure 4-2, Revision 1
- Figure 4-5, Revision 1
- Figure 4-6, Revision 1
- Appendix A - H&S Plan
- Appendix B - SOPs

**8. Section 3.2.1, Data Gaps:  
Page 3-7 Paragraph 1.**

The following should be added to this section of the report:

During the boring processes, if significant contamination is observed or free product is suspected a monitoring well may be installed at the boring location.

**Response**

The Navy has agreed to RIDEM's request to install a monitoring well in a designated boring location if significant contamination is observed or suspected.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 3-9Rev

**9. Section 3.2.1, Data Gaps:  
Page 3-7 Paragraph 2.**

This section of the report provides the rationale for the collection of surface soil samples.

Surface soil sample # 19, 25 and 26 are designed to determine the extent of PCB contamination along the northern end of the landfill.

Surface soils sample # 19 is designed to determine the extent of PCB contamination associated with subsurface soil sample # 2. The Division recommends examining the surface soil sample # 2 location, and collecting a soil sample in the proposed area for subsurface soil sample # 19 which is similar in appearance to surface soil sample # 2, similar staining etc.

Surface soil sample # 25 is located approximately 120 feet east southeast of surface soil sample # 4, which contained low levels (<1 ppm) of PCBs. Surface soil sample # 25 is located approximately 200 feet south southeast of test pit 1, which contained significant levels of PCBs. Therefore, in the absence of visual signs of contamination at this location, the Division recommends relocating this sample to the interior of the landfill.

Surface soil sample # 26 is located within sixty feet of test pit 1 and surface soil sample # 4. This sample is better situated to determine the extent of PCB contamination in the area.

**Response**

HNUS will employ the RIDEM criteria for choosing the referenced sampling locations listed above. In addition, HNUS has revised the sampling locations of SS-24 and SS-25 as discussed during the February, 1995 meeting with RIDEM.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 3-7Rev
- Page 4-18Rev
- Figure 4-2, Revision 1
- Figure 4-4, Revision 1
- Table 4-6, Revision 1

**10. Section 3.2.1, Data Gaps:  
Page 3-7 Paragraph 1.**

The following should be added to this section of the report:

In addition to the proposed sampling locations, samples will be collected from leachate

outbreaks or areas of observed staining or contamination.

**Response**

An initial ecological walkover was conducted during the Fall of 1994 and three sediment samples were collected from the general vicinity of the locations shown on Figure 4-2. No areas of visible contamination, leachate outbreaks, or stressed vegetation were noted at this time. A supplemental ecological walkover will be conducted during the Phase II RI fieldwork and additional samples will be collected if there are any visible contamination, leachate outbreaks, or stressed vegetation noted at this time.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-15Rev
- Page 4-16Rev
- Page 4-17Rev
- Page 4-17A

**11. Section 3.2.1, Data Gaps:  
Page 3-8 Paragraph 1.**

This section of the report deals with the sediment sample locations. The report contains a typo in that it has mislabeled the samples collected during the Phase I investigation as proposed sediment sample locations. The Division recommends collecting sediment samples in the following locations:

Along the foot of the landfill or from any observable leachate outbreak.

Along the stream or conduit located in the center of the wetland, if leachate outbreaks or contamination is observed in this area.

**Response**

Phase II sediment samples were collected in the vicinity of the Phase I samples in the Fall of 1994 (see figure 4-2 for locations) to confirm Phase I sampling results and to collect additional data (SEM & AVS) which were not collected during the original study.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-15Rev

**12. Section 3.2.1, Data Gaps:  
Page 3-8 Paragraph 2.**

This section of the report indicates that boring B-15 and B-16 are designed to determine the extent of PCB contamination in the northern end of the site. A review of information provided in aerial photographs and the Confirmation Study would seem to indicate that the landfill extends to the north of boring B-15 and possibly to the north of boring B-16. The Division recommends adjusting the boring locations accordingly.



### **Response**

Boring locations B-15 and B-16 will be placed in the northern end of the site with the actual locations to be determined by field observations. The text and figures have been revised to show the approximate locations.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 3-8Rev
- Figure 4-2, Revision 1
- Figure 4-5, Revision 1

**13. Section 3.2.1, Data Gap-5:  
Page 3-10 Paragraph 1.**

This section of the report provides the rationale for monitoring wells MW # 13S/R, MW 12S and B-25. The Navy has indicated that the final location for these subsurface explorations will be based upon the results of the remedial excavation carried out in this area. The Division will review the proposed locations when submitted by the Navy.

### **Response**

The final location for MW-13 (S/R), MW-12(S), MW-14(S) and B-24 will be determined by field observations made during the soil removal action. The text and figures have been revised to show approximate locations. (RIDEM comment also references B-25, which the Navy is interpreting to be the Former B-25, now numbered B-24).

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 3-9Rev
- Page 3-10Rev
- Figure 4-2, Revision 1
- Figure 4-5, Revision 1
- Figure 4-6, Revision 1

**14. Section 3.2.1, Data Gaps:  
Page 3-8 Paragraph 1.**

This section of the report deals with the proposed locations of monitoring wells. Based upon the results of the Phase I Investigation the Division recommends placing a monitoring well in a central location between B-6, B-23 and B-8. The Division also recommends placing a second monitoring well either to the north or south of excavation area "N". The final location of this monitoring well would be based upon field observations conducted during test pits and the excavation in the area.

## **Response**

MW-9 has been moved to a location which is in a central area between Phase I boring locations B-6, B-23, and B-8. MW-3A(S) has been identified in the of excavation area "N", with the exact location to be determined by field observations made during the soil removal action. The text and figures have been revised to show the approximate locations.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 3-9Rev
- Page 3-10Rev
- Figure 4-2, Revision 1
- Figure 4-5, Revision 1
- Figure 4-6, Revision 1

**15. Volume 4, Page 4-25;  
Section 4.2.7.3, Paragraph 3.**

"The maximum footage of bedrock coring will be 10 feet."

The above should be modified as follows:

Bedrock coring in the fractured shale will proceed to competent bedrock. The fractures in the cores will be examined to ascertain whether competent bedrock has been reached.

## **Response**

The workplan has been revised to state that bedrock coring will proceed to competent rock. The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-25Rev
- Table 4-4, Revision 1

**16. Section 4.2.8.2, Low Flow Sampling Procedures:  
Page 4-30, Paragraph 3.**

"Following purging procedures, samples will be collected directly through the tubing into appropriate sample bottles."

The water table at the site is shallow. Therefore potential problems associated with the use of pumps to collect water samples should be avoided, and the samples should be collected using bailers.

## **Response**

As agreed upon during the referenced conference call, HNUS will conduct low flow sampling at the site but will collect a confirmatory VOC sample with a bailer from a well designated

for duplicate sample collection using low flow.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-28Rev
- Page 4-30A
- Table 4-3, Revision 1

**17. Appendix B, Page 13:  
Section 6.3, Paragraph 5  
(Appendix C, Section 5)**

This section of the report should be modified to meet requirements of the State of Rhode Island Groundwater Regulations. The necessary modifications include but are not limited to the following:

Threaded or press joints only on PVC pipe (no glued joints), all joints shall be fitted with an "O" ring or wrapped with Teflon tape.

The well screen slot size shall retain at least 90% of the grain size of a filter pack. A bottom cap and a sump sediment trap shall be installed.

The ground surface seal shall extend to a minimum of 40 inches below the land surface and shall be flared such that the diameter at the top is than the diameter at the bottom. The top of the ground surface seal shall be sloped away from the well casing and shall be imprinted with the designation of the monitoring well.

*The submittal did not reflect all of the requirements of the groundwater regulations, for example sizing the filter pack to the geology of the area. The Division is aware that the necessary modifications will be in the next submittal.*

**Response**

HNUS has reviewed RIDEM well construction criteria and has incorporated all necessary changes with the exception of the construction method of the surface seal. HNUS has found that a flared surface seal (with the diameter increasing as depth decreases) creates a condition which allows frost heaving to occur due to the expansion of water as it freezes underneath the shallower portion of the flare. For this reason, HNUS recommends that the surface seal be constructed with it's base below the area's frost line as shown on Figure 4-7 of the report.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-23Rev
- Page 4-23A

18. **Appendix B, Page 15:**  
**Section 6.4, Paragraph 1**  
(Section 4.2.7.6, Well Development).

"Development will continue until pH, temperature and specific conductance have stabilized and turbidity is < 10 NTU or has stabilized to + or - 10% on successive well volumes."

The following should be modified as follows:

Development will continue until pH, temperature and specific conductance have stabilized and turbidity is < 10 NTU. If the 10 NTU criteria is not achievable, the Parties will determine if a turbidity standard of + or - 10% of successive well volumes is appropriate on a case by case basis.

*The above requested modification was not found in the report. The State is aware that the necessary modifications will be found in the next submittal. Please be advised that the proposed two hour development period may not be appropriate for the site. Therefore the Work Plan should be modified to indicate that development may be carried out for more than two hours.*

**Response**

The workplan has been revised to include the above listed modification. An upper limit of three hours has been established for well development. Should a well not exhibit groundwater parameter stabilization at the end of three hours, HNUS will contact the Navy for instructions regarding a contingency course of action.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-26Rev
- Page 4-26A

19. **Appendix B, Page 15:**  
**Section 6.5, Paragraph 2**  
(Section 4.2.7.6, Well Development)

"Additionally, at those sites where the presence of a non-aqueous phase liquid (NAPL) is anticipated due to previous site information or as potentially indicated by test or monitoring well boring observation, the presence of NAPLs will be assessed (e.g. the thickness of the NAPL will be determined prior to sampling with an oil/water interface probe."

The Division recommends the following:

Prior to taking water level measurements a head space reading should be collected and recorded for each well using a HNU or an OVA.

An oil/water interface probe should be used at all wells independent of site history. The use of an oil/water interface probe in lieu of an electronic water sensing device will not generate any appreciable delays or cost in sampling the wells.

NAPLs detected in wells should be sampled prior to well purging.

*Although not stated in the work plan, [it] is the Division's understanding that all wells will be tested and if required samples for NAPLs approximately three days after the wells have been developed. This procedure will meet the Division's requirements.*

#### **Response**

The workplan has been revised and will include the collection of a headspace reading prior to well development. In addition, the workplan states that an oil/water interface probe will be employed to determine water levels and to check for the existence of NAPLs.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-26Rev
- Page 4-26A
- Page 4-28Rev
- Page 4-30A

**20. Volume IV, Page 3-2:  
Section 3.4, Paragraph I**

This section outlines the format to be used to depict the extent of contamination at the sites (graphs, diagrams, etc.). The State recommends that figures be included which depict the concentrations of contaminants (total VOC, SVOC etc.) at each sample point from an aerial view and from appropriate cross sections with the designated depths.

*The Response to the above comment was not found in the Work Plan.*

#### **Response**

HNUS will display analytical data on report figures as requested by RIDEM.

### **RISK ASSESSMENT PLAN - ECOLOGICAL EVALUATION**

**21. Volume VI, Page 1:  
Section 1.0  
(Section 8.0, Risk Assessment)**

The information presented in this section of the reports indicates that field activities carried out for the ecological risk assessment will consist of a qualitative review of wildlife in the area and the collection of sediment and water samples. Activities of this nature are routinely carried out during Phase I investigations. Therefore, the Work Plan should stipulate that if required, additional bioassay, bioassessments etc. will be carried out at the site prior to the completion of the ecological risk assessment. RIDEM will review any

proposals concerning the necessity of said studies.

In addition, since these basic activities were not carried out during Phase I investigations, an interim deliverable should be generated which will include at a minimum, indicator species, exposure scenarios, end points etc. This deliverable must be generated prior to risk assessment calculations.

The State is aware that the offshore sediment and biota sampling will be posted under a separate Work Plan. These analysis are an integral part of an ecological risk assessment. Therefore the State must receive this Work Plan prior to the Spring/Summer sampling window.

*The Work Plan includes a conceptual proposal on how the ecological risk assessment will be performed. Certain key aspects of the ecological risk assessment, such as indicator species, were not specified in the Work Plan. The specifics of the ecological risk assessment will apparently be based upon information gathered from the field investigations. The Division recommends that the navy contact the State concerning these species prior to calculating the ecological risk assessment. In addition, the Division reserves the right to request bioassays, diversity analysis or other field ecological risk assessment techniques should the results of the above mentioned modeling effort prove to be deficient.*

*The Navy will contact the State concerning these specifics prior to calculating the ecological risk assessment. In addition, the Division reserves the right to request bioassays, diversity analysis or other field ecological risk assessment techniques should the results of the above modeling effort prove to be deficient.*

#### **Response**

HNUS will conduct a supplemental ecological walkover to ensure that all species data requirements for RIDEM are met. HNUS has consulted with RIDEM wetlands personnel and has identified been instructed by RIDEM regarding requirements. The Navy will provide RIDEM with advanced notification (a minimum of 72 hours in advance) of the planned execution of this task.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 4-16Rev
- Page 4-17Rev
- Page 4-17A

**22. Section 7.2.3, Representative Concentrations and Upper Confidence Limit Values:  
Page 7-2, Paragraph 5.**

This section of the report indicates that the average concentration of contaminants will be used as the contact representative concentration. The report also discusses the upper 95% confidence interval. Risk assessments are normally conducted using the average and the maximum concentration of contaminants (worst case scenario). Although not stated, it is interpreted that reference upper 95% confidence interval is the value to be used in the worst case scenario. Please clarify the above.

### **Response**

For the evaluation of the risk associated with site soils, the representative exposure point concentration will be developed by calculating the 95% Upper Confidence Level (UCL) of the mean concentration of each compound evaluated. For site groundwater, the representative exposure point concentrations will consist of both the 95% UCL for the mean concentration and the maximum observed concentration of each compound evaluated.

**23. Section 7.3.3.2, Future Land Use:  
Page 7-7, Paragraph 2.**

This section of the report discusses future land use of the site. Be advised that a marina is planned to be developed in the area. This development may result in the construction of condominiums in the area.

### **Response**

As agreed upon during the referenced conference call, the workplan has been modified to include not only future industrial/commercial, construction, and recreational scenarios but also future residential and trespassing scenarios.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 7-7Rev

**24. Section 10.0, Treatability Study and Feasibility Study Plan:  
Pages 10-1 - 10-10.**

This section of the report contains a good outline of the Feasibility Study and potential remedial alternatives. However, the report should note that due to the location of the landfill, (landfill is subject to periodic flooding) and the deposition of the waste (a significant portion of the waste material is located below the water table) that conventional remedial alternatives, such as landfill capping, may not be suitable.

### **Response**

The Feasibility Study plan outlined in Section 10 has been modified to state that conventional remedial alternatives, such as landfill capping, may not be suitable due to the location the landfill within the water table.

The following are the sections of the workplan which have been revised to reflect the amendment requested by RIDEM:

- Page 10-2Rev
- Page 10-3Rev
- Page 10-5Rev
- Page 10-6Rev